COUNTY OF SUFFOLK



SUFFOLK COUNTY DEPARTMENT OF HEALTH SERVICES DIVISION OF ENVIRONMENTAL QUALITY

STANDARDS FOR APPROVAL OF PLANS AND CONSTRUCTION FOR SEWAGE DISPOSAL SYSTEMS FOR OTHER THAN SINGLE FAMILY RESIDENCES

APPENDIX C

REQUIREMENTS OF DEPARTMENT OF HEALTH SERVICES AND RESPONSIBILITIES OF LICENSED PROFESSIONAL ENGINEERS IN INSPECTING ON-LOT SEWAGE TREATMENT SYSTEMS OR COLLECTION SYSTEMS

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Vito Minei, P.E. Director of Environmental Quality

APPENDIX C

REQUIREMENTS OF DEPARTMENT OF HEALTH SERVICES AND RESPONSIBILITIES OF LICENSED PROFESSIONAL ENGINEERS IN INSPECTING ON-LOT TREATMENT SYSTEMS OR SEWAGE COLLECTION SYSTEMS

C1. GENERAL

The Suffolk County Department of Health Services requires that installation of on-lot treatment systems, and collection systems be certified by a licensed professional engineer or registered architect as compliance of construction with Department standards.

The Suffolk County Department of Health Services prefers that the duties of construction inspection be carried out by the architect or engineer responsible for designing the project. However, an independent licensed professional engineer or registered architect is acceptable to the Department provided that the design engineer and owner authorize the choice. In order to assure impartiality, the inspecting engineer must have no financial or other vested interest in the construction contractor or installer. In cases where the design engineer acts as contractor, the inspecting engineer must be independent.

This appendix contains samples of certificates and log sheets to be used in the certification procedure. All are to be submitted to the Department at time of application for final approval except for Authorization of Engineer which must be submitted prior to commencing construction. Certain larger projects require pre-job meetings prior to commencing construction. Authorization may be submitted to the Department at this meeting.

Suffolk County Department of Health Services AUTHORIZATION OF LICENSED PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT FOR THE INSPECTION OF INSTALLATION OF

[]	modified subs	urface sewage	disposal :	system		
[]	sewage treatm	ent plant [] collection	on system		
HEALTH D	EPARTMENT	REFERENCI	E NUMBI	ER		
DIST.	SECT	BL	OCK	LOT_		
Statement of Owner:(name) Engineer, registered Ar specified installation.	I hereby state of	out one) to p	ame of for	irm) ontrolled insp	_ a licensed Prection work for	rofessional the above
Signature	(owner or office	cer of corpora	tion)			
Print Name:						
	Date					
Address						
Statement of L.P.E. or R						
Name of				R.A.	preparing	plans
Address						
I hereby certify that by the owner to perform						e) engaged ble to me.
Signature	gnature Date					
	(Affix seal)					
Statement of L.P.E. or R	A. performing	inspections:				
I,above. I personally, or State Education Law, watests, and all required in Department of Health Se	spection and tes	assumed responnel under maring the installs treports shall	onsibility and direct solution and lation and lation and lation and lation and lation are signed.	for the inspect upervision in I will perform I by me and fi	etion of the work accordance with the required inspe- led with the Suffo	designated New York ections and olk County
I certify that I have no f performing work on the			est in the o	construction co	ompany(ies) or co	ntractor(s)
Signature	(A CC C 1)			Date _		
	(Attix Seal)					

Suffolk County Department of Health Services

CERTIFICATE OF CONTROLLED INSPECTION

	[] modified sul	bsurface sewa	age disposal system			
	[] sewage treat	tment plant	[] collection system	1		
Н	EALTH DEPAR	RTMENT RE	FERENCE NUMBE	R		
DIST	S	ECT	BLOCK	LOT		
N	Vame of Owner					
A	Address					
hereby New Y schedu Suffol and te	y certify that I p York State Educule) during the ir	personally, or eation Law, h estallation of trent of Hea ate:	neer or Registered Ard qualified personnel have been present at a the work specified ab alth Services and here	under my direct s ill times (as speci ove in accordance	supervision in actified by the Health with the schedule	cordance with th Department le specified by
[]	All material ar County Sanitar		forms to approved pla	ns and guidelines	s issued pursuant	to the Suffolk
[]			forms to approved placept as described below		s issued pursuant	to the Suffolk
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Suffolk County Department of Health Services

CERTIFICATE OF COMPLIANCE

(insert dates) in ect (cross out those niformity coefficient
pecification for sand ns and Construction
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SCHEDULE OF INSPECTIONS OF COMPLETED SEGMENTS OF MODIFIED SUBSURFACE SEWAGE DISPOSAL SYSTEMS

The inspecting engineer is responsible to complete inspection of all aspects of a modified subsurface sewage disposal system. The following schedule outlines the major components to be inspected. The engineer shall submit a log with his certification indicating that each component or segment was satisfactorily completed, date, time and length of each inspection, and initials of the person performing the inspection.

- 1.) All sewer piping (installation and grade). Inspection of piping shall assure that all pipe is of proper type, construction of manifold(s) is according to specifications and installed properly, pipe is run at proper invert elevation and slope, and all joints are properly constructed. 4
- 2.) Lift station(s). ³
- 3.) Septic tank(s) installation and leak testing. ^{3,4}
- 4.) Grease trap and separate disposal system for food processing stores. ⁴
- 5.) Dosing siphon (if applicable).
- 6.) Leaching field (retain samples of all materials)
 - a. Inspection and leak testing of vinyl liner installation to assure that liner is of one piece construction, and is installed and sealed in accordance with manufacturer specifications. ^{1,3,4}
 - b. Lower gravel bed.
 - c. Lower collection manifold.
 - d. Filter material placement (bottom). ¹
 - e. Installation of sand & gravel. 1,2
 - f. Upper gravel bed.
 - g. Upper dosing manifold.
 - h. Filter material placement (top). ¹
- 7.) Denitrification tank waterproofing and leak testing. ^{1,3,4}
- 8.) Proper quantities and placement of media. ^{1,4}

(Verification of proper quantities shall be submitted with final certification).

- 9.) Final leaching pools. 4
- 10.) Cast iron covers. 4
- 11.) Final grading and proper backfilling. 1,2,4
- Requires full time presence of inspecting engineer or qualified personnel under engineer's supervision during installation.
- Sieve analysis to assure that sand and gravel is clean and conforms to specifications.
- Leak testing of all vinyl lined areas and watertight tanks and chambers. See Appendix B for leak test requirements for watertight chambers.
- ⁴ Requires call-in to Department 48 hr. prior to commencement of installation.

SCHEDULE OF INSPECTIONS OF COMPLETED SEGMENTS OF SEWAGE TREATMENT PLANTS

The inspecting engineer is responsible to complete inspection of all aspects of a sewage treatment plant. The following schedule outlines the major components to be inspected. The engineer shall submit a log with his certification indicating that each component or segment was satisfactorily completed, date, time and length of each inspection, and initials of the person performing the inspection.

- 1.) Concrete forms and reinforcing steel shall be inspected for proper placement.
- 2.) All placement of concrete shall be inspected. Four test cylinders shall be taken for each 50 cu. yds. of concrete required. Weather conditions and temperature shall be recorded during placement of concrete. 1,4
- 3.) Treatment plant equipment installation(s) and checkout by manufacturer's service representative.
- 4.) Exfiltration and stability tests.
 - a. Inspection and leak testing of all tanks to assure that tanks are installed and sealed in accordance with manufacturer's specifications. ^{1,3}
 - b. Inspection and leak testing of wet wells. ^{1,3}
- 5.) Infiltration tests for tanks and wet well situated below groundwater level.
- 6.) Piping test in accordance with manufacturer's specifications.
- 7.) Final leaching pools or recharge basins. ⁴
- 8.) Cast iron covers.
- 9.) Final grading.
- 10.) Proper backfilling. 1,2
- 11.) Installation of groundwater monitoring well. 4
- Requires full time presence of inspecting engineer or qualified personnel under engineer's supervision during installation.
- ² Sieve analysis to assure that sand and gravel is clean and conforms to specifications.
- Leak testing of all watertight chambers. See Appendix B for leak test requirements for watertight chambers.
- ⁴ Requires call-in to Department 48 hr. prior to commencement of installation.

SCHEDULE OF INSPECTIONS OF COMPLETED SEGMENTS OF COLLECTION SYSTEMS

The inspecting engineer is responsible to complete inspection of all aspects of a collection system. The following schedule outlines the major components to be inspected. The engineer shall submit a log with his certification indicating that each component or segment was satisfactorily completed, date, time and length of each inspection, and initials of the person performing the inspection.

- 1.) All sewer piping (installation and grade). Inspection of piping shall assure that all pipe is of proper size, type and class; that construction is according to specifications and installed properly; that pipe is run at proper slope and alignment; and that all joints are properly constructed.
- 2.) Lift station(s) construction and equipment installation.
- 3.) Pipe to manhole connections.
- 4.) Manhole flow channel and bench.
- 5.) House connections.
- 6.) Pipe exfiltration, infiltration, deflection, leakage and pressure tests. 1,2,3
- Requires full time presence of inspecting engineer or qualified personnel under engineer's supervision during installation.
- Requires call-in to Department 48 hr. prior to commencement of installation.
- ³ See Appendix E.

05/10/2004